

25-May-2017 11:00 12:00

Abstract:**DENGUE SHOCK SYNDROME IN THAI CHILDREN****Background**

Dengue shock syndrome (DSS) is the most severe manifestations of dengue infection with high mortality. We studied DSS in hospitalized children at Queen Sirikit National Institute of Child Health (QSNICH), Bangkok, Thailand to describe clinical features and explore factors associated with poor outcomes.

Methods

Medical records of patients diagnosed DSS during Jan 1, 2009 – Dec 31, 2015 were reviewed. Serology and virology confirmation were done at Armed Force Research Institute of Medical Science (AFRIMS), Bangkok as the Dengue surveillance program.

Results

Two-hundred and twenty-two of 4,695 children hospitalized with Dengue had DSS (4.7%). Ninety percent were secondary dengue infection and all 4 Dengue serotypes including DEN 1 (31%), DEN 3 (29%), DEN 2 (24%), and DEN 4 (16%) were found. The patients' mean age was 7.8 years (range 3 months – 16 years). The mean duration of fever before shock was 5 ± 1.5 days (range 1-10 days). Almost all patients had evidences of plasma leakage including hemoconcentration (52%), pleural effusion on chest film (59%) and hypoalbuminemia (86%). Manifestations commonly found in DSS were lethargy (81%), vomiting (69%), hepatomegaly (59%), abdominal pain or tenderness (55%), and bleeding (48%). The mean platelet count was 28,124/cu.mm., (range 2,000 – 104,000). Fifty-nine percent had narrowing pulse pressure or faint pulses, whereas 41% had hypotension or unmeasurable BP. Twenty-four percent required mechanical ventilation and 34 (16%) died. Factors significantly associated with death were presenting with hypotension or unmeasurable BP (OR 7.6, 95% CI 3.1-18.6) and platelet count less than 20,000/mcL (OR 2.2, 95% CI 1-4.5).

Conclusions

Nearly all DSS were from secondary dengue infection. The most significant factor associated with death is severe degree of shock, therefore early detection of shock should be emphasized.

Co-authors

P. Suntarattiwong¹, M. Nilapat¹, R. Waleerattanapa², P. Sirikutt¹

¹Queen Sirikit National Institute of Child Health, Dept. of Pediatric, Bangkok, Thailand

²Queen Sirikit National Institute of Child Health, Dengue Center, Bangkok, Thailand